

RKZ-KG Series

Silicon Planar Zener Diode for Surge Absorption and Stabilizer

REJ03G1512-0300

Rev.3.00

Feb 02, 2009

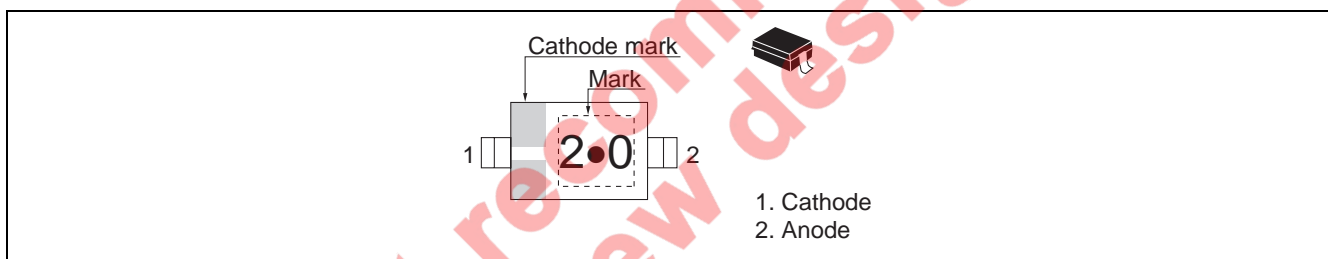
Features

- These diodes are delivered taped.
- Lineup of environmental friendly Halogen free type (RKZ-KG-P6 Series 6:Pb free & Halogen free).
- Ultra small Resin Package (URP) is suitable for compact and high-density surface mount design.

Ordering Information

Part No.	Laser Mark	Package Name	Package Code	Taping Abbreviation (Quantity)
RKZ-KG Series	Let to Mark Code	URP	PTSP0002ZA-A	P (3,000 pcs / reel)
RKZ-KG P6 Series (Halogen-free type)				

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	Pd *1	200	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Note: 1. With P.C. Board.

Electrical Characteristics

(Ta = 25°C)

Part No.	Zener Voltage		Reverse Current		Dynamic Resistance		ESD-Capability *2	
	Vz (V) *1		Test Condition	I _R (μA)	Test Condition	r _d (Ω)	Test Condition	— (kV) *2
	Min	Max	I _Z (mA)	Max	V _R (V)	Max	I _Z (mA)	Min
RKZ2.0BKG	1.90	2.20	5	120	0.5	100	5	30
RKZ2.2BKG	2.10	2.40	5	120	0.7	100	5	30
RKZ2.4BKG	2.30	2.60	5	120	1.0	100	5	30
RKZ2.7B2KG	2.65	2.90	5	120	1.0	110	5	30
RKZ3.0B2KG	2.95	3.20	5	50	1.0	120	5	30
RKZ3.3B2KG	3.25	3.50	5	20	1.0	130	5	30
RKZ3.6B2KG	3.55	3.80	5	10	1.0	130	5	30
RKZ3.9B2KG	3.87	4.10	5	10	1.0	130	5	30
RKZ4.3B2KG	4.15	4.34	5	10	1.0	130	5	30
RKZ4.7B2KG	4.55	4.75	5	10	1.0	130	5	30
RKZ5.1B2KG	4.98	5.20	5	5	1.5	130	5	30
RKZ5.6B2KG	5.49	5.73	5	5	2.5	80	5	30
RKZ6.2B2KG	6.06	6.33	5	2	3.0	50	5	30
RKZ6.8B2KG	6.65	6.93	5	2	3.5	30	5	30
RKZ7.5B2KG	7.28	7.60	5	2	4.0	30	5	30
RKZ8.2B2KG	8.02	8.36	5	2	5.0	30	5	30
RKZ9.1B2KG	8.85	9.23	5	2	6.0	30	5	30
RKZ10B2KG	9.77	10.21	5	2	7.0	30	5	30
RKZ11B2KG	10.76	11.22	5	2	8.0	30	5	30
RKZ12B2KG	11.74	12.24	5	2	9.0	35	5	30
RKZ13B2KG	12.91	13.49	5	2	10.0	35	5	30
RKZ15B2KG	14.34	14.98	5	2	11.0	40	5	25
RKZ16B2KG	15.85	16.51	5	2	12.0	40	5	25
RKZ18B2KG	17.56	18.35	5	2	13.0	45	5	25
RKZ20B2KG	19.52	20.39	5	2	15.0	50	5	20
RKZ22B2KG	21.54	22.47	5	2	17.0	55	5	20
RKZ24B2KG	23.72	24.78	5	2	19.0	60	5	15
RKZ27BKG	25.10	28.90	2	2	21.0	70	2	15
RKZ30BKG	28.00	32.00	2	2	23.0	80	2	13
RKZ33BKG	31.00	35.00	2	2	25.0	80	2	8
RKZ36BKG	34.00	38.00	2	2	27.0	90	2	8

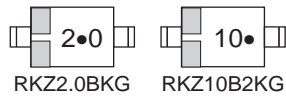
Notes: 1. Tested with pulse (Pw = 40 ms).

2. C =150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse
Failure criterion ; According to IR spec

Mark Code

Part No.	Mark No.	Part No.	Mark No.
RKZ2.0BKG	2 • 0	RKZ9.1B2KG	9 • 1
RKZ2.2BKG	2 • 2	RKZ10B2KG	1 0 •
RKZ2.4BKG	2 • 4	RKZ11B2KG	1 1 •
RKZ2.7B2KG	2 • 7	RKZ12B2KG	1 2 •
RKZ3.0B2KG	3 • 0	RKZ13B2KG	1 3 •
RKZ3.3B2KG	3 • 3	RKZ15B2KG	1 5 •
RKZ3.6B2KG	3 • 6	RKZ16B2KG	1 6 •
RKZ3.9B2KG	3 • 9	RKZ18B2KG	1 8 •
RKZ4.3B2KG	4 • 3	RKZ20B2KG	2 0 •
RKZ4.7B2KG	4 • 7	RKZ22B2KG	2 2 •
RKZ5.1B2KG	5 • 1	RKZ24B2KG	2 4 •
RKZ5.6B2KG	5 • 6	RKZ27BKG	2 7 •
RKZ6.2B2KG	6 • 2	RKZ30BKG	3 0 •
RKZ6.8B2KG	6 • 8	RKZ33BKG	3 3 •
RKZ7.5B2KG	7 • 5	RKZ36BKG	3 6 •
RKZ8.2B2KG	8 • 2		

Note: 1. Example of Marking



Not recommend
for new design

Main Characteristic

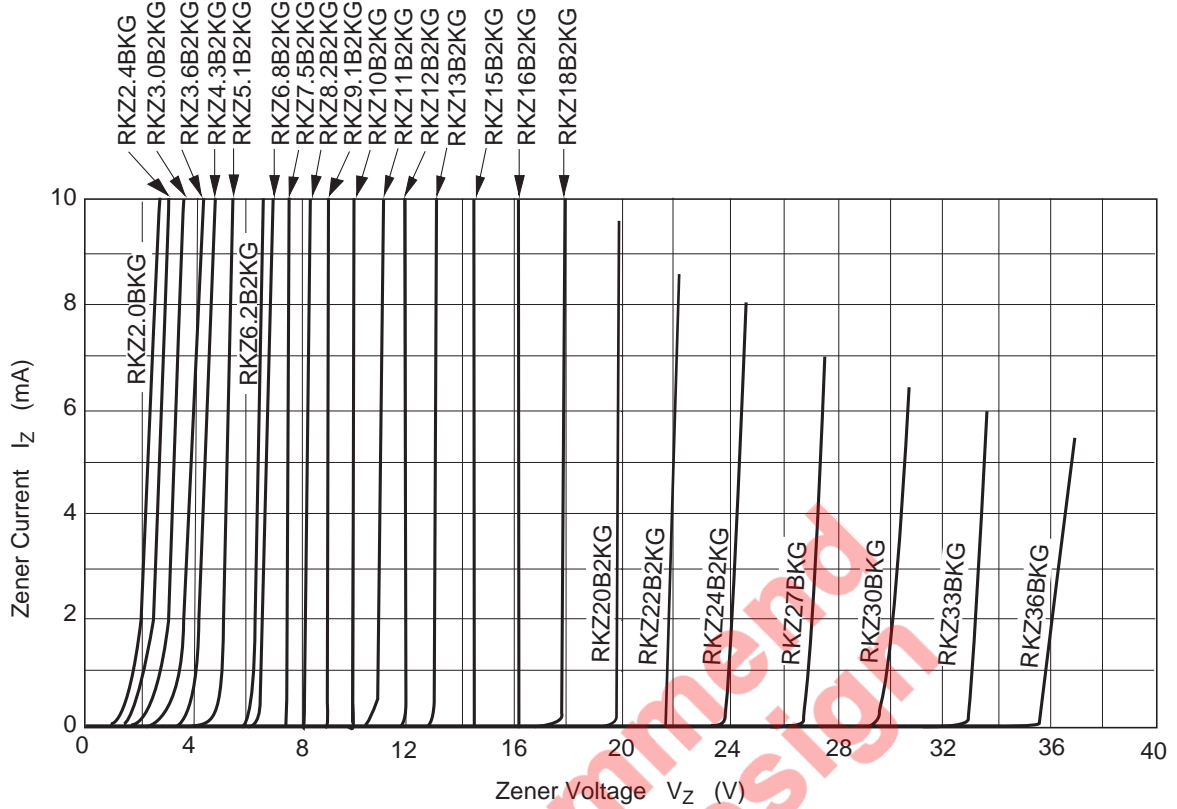


Fig.1 Zener current vs. Zener voltage

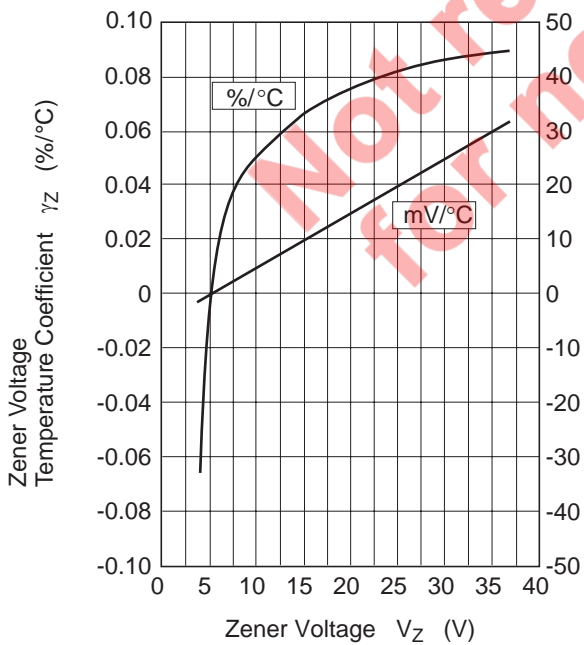


Fig.2 Temperature Coefficient vs. Zener voltage

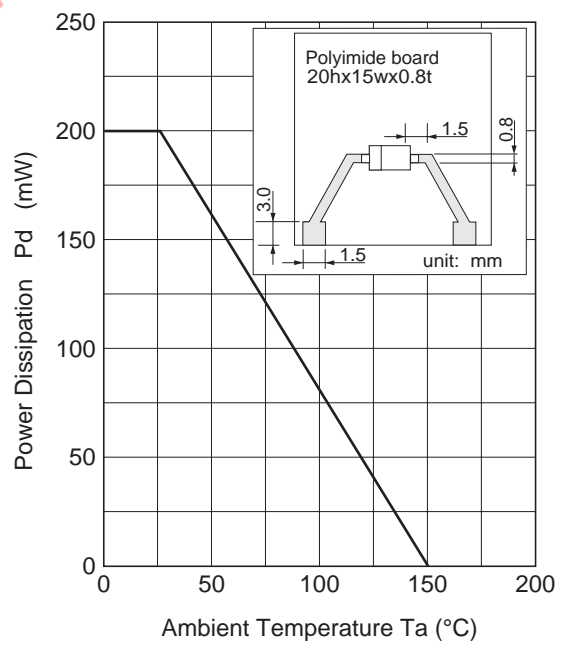


Fig.3 Power Dissipation vs. Ambient Temperature

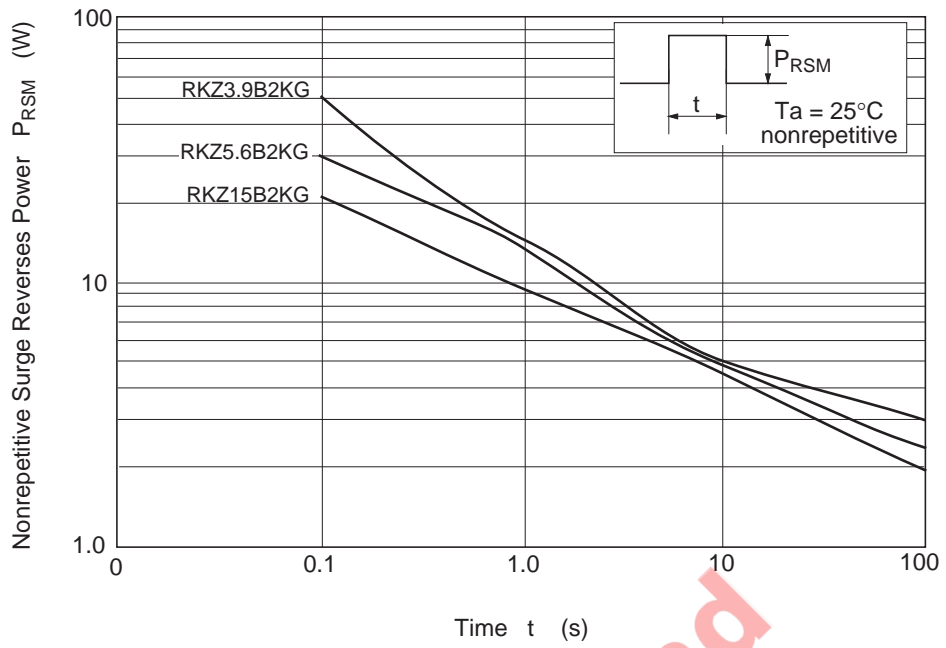
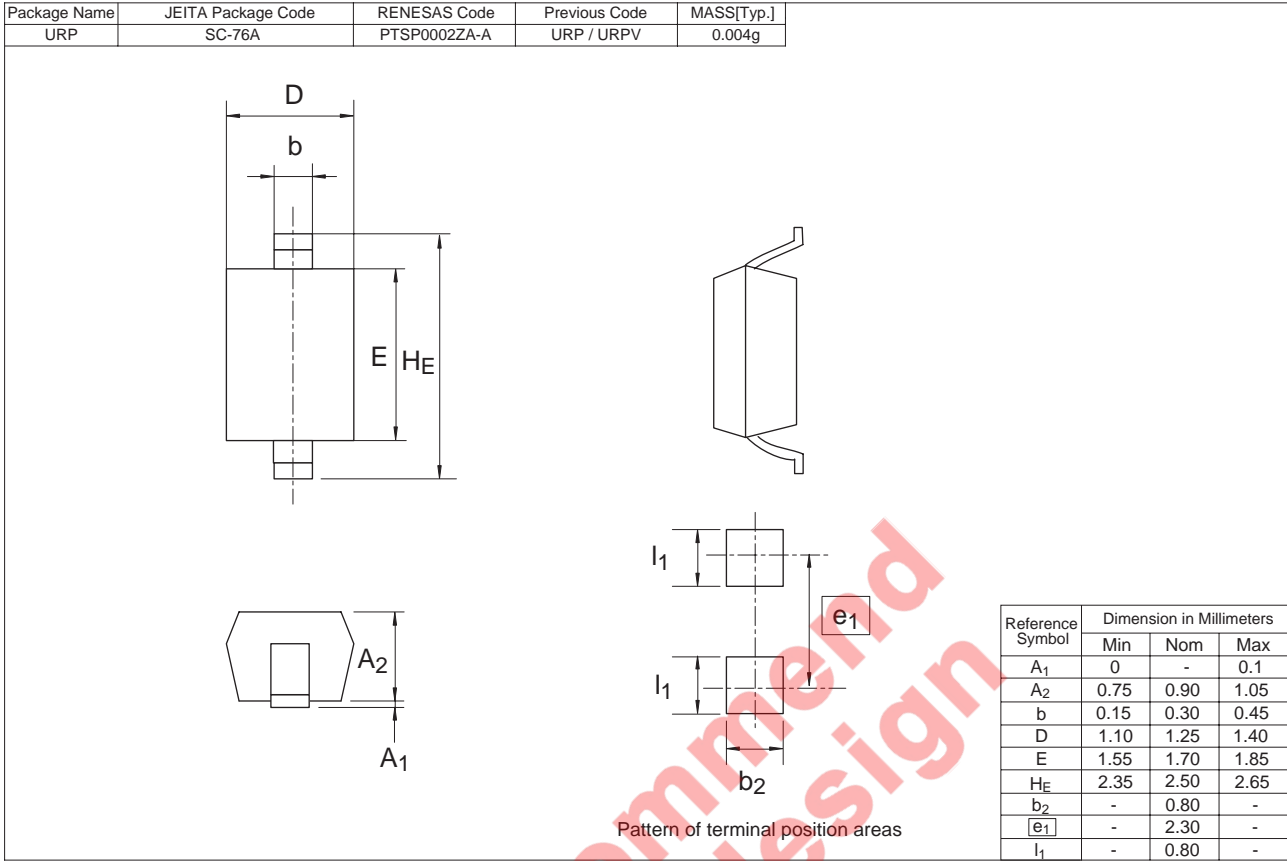


Fig.4 Surge Reverse Power Ratings(Reference data)

Not recommended for new design

Package Dimensions



Not recommended for new design

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April 1st, 2010
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